**Task:**

**Application field:** Environment

**Material:** Thick sludge, centrifugal and dehydrated sludge, compost,

**Feed size:** 0-20 mm partially with agglutinations

**Feed quantity:** 50 ml per batch

**Material specification(s):** smeary, containing water

**Customer requirement(s):** < 100 µm, determination of heavy metall

**Subsequent analysis:** ICP-MS Mass Spectroscopy

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**Solution:**

**Selected instrument(s):** PM 100 CM Planetary Ball Mill

**Configuration(s):** Grinding jar 250 ml, zirconia;
5 grinding balls Ø 30 mm of zirconia or
12 grinding balls Ø 20 mm zirconia

**Parameter(s):** Revolution speed 400 rpm

**Time:** 10 min. (per sample)

**Achieved result(s):** < 100 µm, homogeneous

**Remark(s):** For grinding dry samples 5 balls of 30 mm are recommendable, for wet material 12 balls of 20 mm are favourable

**Recommendation:** For sample preparation of dry and wet sludges the Planetary Ball Mill PM 100 CM ist suitable under the above mentioned conditions.